

Attorney's Docket No.: 14083/002001

REMARKS

Reconsideration and allowance of the above-referenced application are respectfully requested.

The title of the invention stands objected to as allegedly not being descriptive. In response, the title is changed to -- LINEAR VARIABLE DIFFERENTIAL TRANSFORMERS WITH IMPROVED MEASUREMENT CAPABILITIES--. However, should the Examiner have any suggestions for a title that would be more descriptive, such suggestions would be appreciated.

Copies of the documents listed on pages 1 and 2 will be submitted in due course.

The Abstract stands objected to as not being sufficiently descriptive. In response, a new Abstract is presented.

Claims 1-3 stand rejected under 35 USC 102(b) as allegedly being anticipated by Neff. This contention is respectfully traversed. In addition, applicants add new claims which further define the advantageous distinctions of the present system.

Specifically, claim 1 specifies a displacement transducer with first and second non-ferromagnetic coil forms with a common axis, and electronic circuitry that generates a signal responsive to the relative displacement in the range of microns or less. Neff certainly does teach a system with two coil forms

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and describes that these can be air core coils. However, nowhere does Neff teach or suggest the important limitation that the electronic circuitry generates a signal responsive to the relative displacement that is in the range of microns or less. In fact, Neff's system uses vacuum tubes, and the drift alone on vacuum tube type circuits is such that displacements on the range of microns or less could not be accurately detected. In any case, nowhere is there any teaching or suggestion in Neff that claim 1 can be met, and therefore it is respectfully suggested that claim 1 should be allowable along with claims 2 and 3 which depend therefrom.

new matter

New claims are also added, each of which define additional aspects of the invention and each of which distinguish over the prior art. Many of these claims define nonferromagnetic, "solid" core or a "material with an outer surface" which further distinguishes over Neff's air core, which is not solid, and does not define an outer surface.

The dependent claims which depend from claim 4 define further advantageous features which are not taught or suggested by the cited prior art.

Claim 24 specifies Barkhausen noise reduction which is nowhere taught or suggested by the cited prior art.

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Claim 28 specifies non-ferromagnetic coil forms which have solid forms (and hence, exclude air coils) and therefore should be further allowable over the cited prior art.

Claim 40 specifies using such a device in an force detecting device, which is not taught or suggested by the cited prior art.

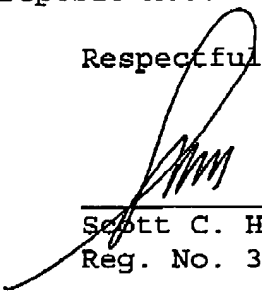
The remaining claims should be allowable for similar reasons to those discussed above.

In view of the above amendments and remarks, therefore, all of the claims should be in condition for allowance. A formal notice to that effect is respectfully solicited.


Please apply \$465.00 and \$780.00 for additional claims any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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